

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (Currently Amended): A method of assisting steering of steered wheels of a vehicle, comprising:

calculating an angular speed and an angular acceleration of a steering wheel of the vehicle;

comparing the angular speed of the steering wheel to a threshold speed;

comparing the angular acceleration of the steering wheel to a threshold acceleration;

and

when the angular speed is greater than the threshold speed and the angular acceleration is greater than the threshold acceleration, applying a phase advance between [[a]] the steering wheel and a rack element so as to decrease response time of the vehicle to an action of a driver of the vehicle on the steering wheel.

Claim 12 (Currently Amended): The method as claimed in claim 11, wherein ~~speed of rotation and angular acceleration of the steering wheel are measured or estimated and a~~ steered wheels steering preset is emitted to an actuator to control the rack element, the steering present being calculated as a function of the ~~speed of rotation~~ angular speed and the angular acceleration of the steering wheel.

Claim 13 (Canceled).

Claim 14 (Currently Amended): The method as claimed in claim 12, wherein the steering preset is calculated based on an angle of steer of the steered wheels and a temporal advance, according to the following equation:

$$\alpha_c(t) = \alpha(t) + t_1 \alpha_1(t) + t_1^2 \alpha_2(t)/2,$$

α_c being the steering present, α being an angle of steer of the steering wheel, t_1 being the temporal advance, α_1 being the angular speed of the steering wheel, and α_2 being the angular acceleration of the steering wheel.

Claim 15 (Currently Amended): The method as claimed in claim 14, wherein the temporal advance is calculated based on [[an]] the angle of steer of the steering wheel.

Claim 16 (Currently Amended): A system for assisting steering of steered wheels of a vehicle, comprising:

a sensor to measure an angular speed and an angular acceleration of a steering wheel of the vehicle; and

a control unit to compare the angular speed of the steering wheel to a threshold speed and to compare the angular acceleration of the steering wheel to a threshold acceleration, wherein

~~means for applying~~ when the angular speed is greater than the threshold speed and the angular acceleration is greater than the threshold acceleration, the control unit applies a phase advance between [[a]] the steering wheel and a rack element so as to decrease response time of the vehicle to an action of a driver of the vehicle on the steering wheel.

Claims 17 and 18 (Canceled).

Claim 19 (Currently Amended): The system as claimed in claim 16, wherein the ~~means for applying a phase advance~~ control unit comprises means for calculating a temporal advance as a function of the angular parameters speed and the angular acceleration of the steering wheel, and means for calculating a steer angle preset as a function of angular parameters of steering of the steered wheels and of the temporal advance.

Claim 20 (Currently Amended): The system as claimed in claim ~~[[19]]~~ 16, wherein the ~~means for calculating a temporal advance as a function of angular parameters of the steering wheel~~ control unit comprises a fuzzy logic element for formulating a confidence index as a function of the angular speed and the angular acceleration of the steering wheel, and a table for deducing a temporal advance from the confidence index.

Claim 21 (New): The method as claimed in claim 11, further comprising:
setting the phase advance equal to zero when the angular speed of the steering wheel is less than the threshold speed or the angular acceleration of the steering wheel is less than the threshold acceleration.

Claim 22 (New): The method as claimed in claim 14, wherein the temporal advance is between 10 and 100 milliseconds.

Claim 23 (New): The system as claimed in claim 16, wherein the control unit sets the phase advance equal to zero when the angular speed of the steering wheel is less than the threshold speed or the angular acceleration of the steering wheel is less than the threshold acceleration.

Claim 24 (New): The system as claimed in claim 19, wherein the means for calculating the steer angle preset calculates the steer angle present according to the following equation:

$$\alpha_c(t) = \alpha(t) + t_1\alpha_1(t) + t_1^2\alpha_2(t)/2,$$

α_c being the steer angle present, α being an angle of steer of the steering wheel, t_1 being the temporal advance, α_1 being the angular speed of the steering wheel, and α_2 being the angular acceleration of the steering wheel.

Claim 25 (New): The system as claimed in claim 24, wherein the temporal advance is between 10 and 100 milliseconds.